

**WHAT IS CLAIMED IS:**

1. A disposable butterfly needle sheath assembly comprising:

5 a butterfly needle mechanism comprising a needle having a rear end coupled to a plastic intravenous tubing and two wings at both sides of the needle; and

10 a plastic sheath comprising a forward aperture, two rear side slits in communication with outside and inside of the sheath, two pairs of upper female snapping members each having a hole and lower male snapping members each having an upward peg in a rear end, each pair being separated by the slit, a latched member in the slits, a slot extended forward from a top of the latched member to a predetermined position adjacent the aperture, the slot being in communication with the latched member;

15 wherein prior to use the butterfly needle mechanism is inserted in the sheath with the needle concealed, the wings anchored on the slot, and the upward pegs are inserted into the holes for securing the upper female snapping members and the lower male snapping members together; in use push the wings forward along the slot until the needle projects from the aperture; and after use pull the wings rearward until the needle has completely concealed in the sheath and a joint of the wings has moved in the slits prior to pushing the wings forward again until being stopped by the latched member.

2. The disposable needle sheath assembly of claim 1, wherein a forward portion of the slot is formed as a horizontal section.

25 3. The disposable needle sheath assembly of claim 1, wherein an intermediate portion of the slot is formed as a recess for anchoring the wings.

4. The disposable needle sheath assembly of claim 1, wherein the latched member is shaped as a triangle.
5. The disposable needle sheath assembly of claim 1, wherein a rearward  
5 portion of the slot extends forward, obliquely.
6. A disposable needle sheath assembly comprising:  
a butterfly needle mechanism comprising a needle having a rear end coupled to a plastic intravenous tubing and two wings at both sides of the  
10 needle; and  
a plastic sheath comprising a forward aperture, a rear side slit in communication with outside and inside of the sheath, a pair of upper female snapping member having a hole and lower male snapping member having an upward peg in a rear end, the pair being separated by the slit, a latched  
15 member in the slit, a slot extended forward from a top of the latched member to a predetermined position adjacent the aperture, the slot being in communication with the latched member;  
wherein prior to use the butterfly needle mechanism is inserted in the sheath with the needle concealed, the wings anchored on the slot, and the  
20 upward peg is inserted into the hole for securing the upper female snapping member and the lower male snapping member together; in use push the wings forward along the slot until the needle projects from the aperture; and after use pull the wings rearward until the needle has completely concealed in the sheath and a joint of the wings has moved in the slit prior to pushing the wings forward  
25 again until being stopped by the latched member.
7. The disposable needle sheath assembly of claim 6, wherein a forward

portion of the slot is formed as a horizontal section.

8. The disposable needle sheath assembly of claim 6, wherein an intermediate portion of the slot is formed as a recess for anchoring the wings.

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9. The disposable needle sheath assembly of claim 6, wherein the latched member is shaped as a triangle.

10. The disposable needle sheath assembly of claim 6, wherein a rearward portion of the slot extends forward, obliquely.

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11. A disposable needle sheath assembly comprising:

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a butterfly needle mechanism comprising a needle having a rear end coupled to a plastic intravenous tubing and two wings at both sides of the needle; and

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a plastic sheath comprising a forward aperture, a rear side slit in communication with outside and inside of the sheath, a pair of upper snapping member having a downward projection and a downward recess, and lower snapping member having an upper recess and an upper projection, the pair being separated by the slit, a latched member in the slit, a slot extended forward from a top of the latched member to a predetermined position adjacent the aperture, the slot being in communication with the latched member;

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wherein prior to use the butterfly needle mechanism is inserted in the sheath with the needle concealed, the wings anchored on the slot, and the downward projection and the downward recess of the upper snapping member are coupled to the upward recess and the upward projection of the lower snapping member, respectively so as to secure the upper snapping member

and the lower snapping member together; in use push the wings forward along the slot until the needle projects from the aperture; and after use pull the wings rearward until the needle has completely concealed in the sheath and a joint of the wings has moved in the slit prior to pushing the wings forward again until  
5 being stopped by the latched member.

**12.** The disposable needle sheath assembly of claim 11, wherein a forward portion of the slot is formed as a horizontal section.

10 **13.** The disposable needle sheath assembly of claim 11, wherein an intermediate portion of the slot is formed as a recess for anchoring the wings.

**14.** The disposable needle sheath assembly of claim 11, wherein the latched member is shaped as a triangle.

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**15.** The disposable needle sheath assembly of claim 11, wherein a rearward portion of the slot extends forward, obliquely.

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